

CLAIM AMENDMENTS

Claim 1. (Currently amended) Mashing process, wherein mash is filtered and wort is obtained, characterized in that the mash is fed to ~~the~~ a filter material having a retentate side, a filtrate side, and a retention rate of below 2  $\mu$ m of a dynamic cross-flow filtration system, namely a means for filtration, where the material to be filtered is moved in a volume segment between a filter surface and a further surface, with at least an essential component of the relative velocity between the material to be filtered and the filter surface, running along the filter area perpendicular to the normal of the filter area (cross-component), said cross-component being essentially produced by movement of surfaces within the cross-flow filtration system itself relative to the material to be filtered, wort is withdrawn from the ~~side-stream~~ filtrate side of the filter material and thickened remainder is withdrawn from the ~~feed~~ retentate side of the filter material.

Claim 2. (Currently Amended) Process according to claim 1 characterized by one or more of the following features:

- a) a dynamic cross-flow filtration system ~~without~~ with rotating disks or concentrically rotating cylinders or with oscillating disks is used as a dynamic cross-flow filtration system;
- b) a material selected from:
- polymer membranes, especially polyamide membranes, PTFE membranes, PVDF membranes, ~~preferably selected from membranes with a retention rate (measured after Pall, Colloid and Surface Science Symposium, Tennessee (1978)) of below 2  $\mu$ m, more preferably of 1  $\mu$ m to 0.04  $\mu$ m, most preferably about 0.1  $\mu$ m;~~
  - steel;
  - nickel; or
  - ceramic;
- or a combination of two or more of such materials is used as a filter material;
- c) a closed, pressurized dynamic cross-flow filtration system is used as a dynamic cross-flow filtration system.

Claim 3. (Currently amended) Process according to claim 1 characterized by one or more of the following features:

- a) the mash used has a reduced husk content; ~~preferably a husk content of 40 to 95% by weight, more preferably a husk content of 50 to 80% by weight, in terms of husk content in the starting mash as 100% by weight~~
- b) the mash used has starch particles of a grain size of below 100  $\mu\text{m}$ , preferably with a particle size distribution, wherein 99% of the particles have a grain size of below 100  $\mu\text{m}$ , 70% of the starch particles have a grain size of below 65  $\mu\text{m}$ , with a significant portion of the starch particles preferably having a bimodal particle size distribution (determined with a laser diffraction spectrometer; Helosystem, Sympatec) with distinct maxima at about 5  $\mu\text{m}$  and about 25  $\mu\text{m}$ ;
- c) the mash used is derived from finely ground powder grist;
- d) the mash includes modified malts;
- e) the mash comprises a mixture of at least two malt flowers of different specification.

Claim 4. (Currently amended) Process according to claim 1 characterized by one or more of the following features:

- a) the operational flow rates, pressures and temperatures are such that a wort flow of 90 to 250 ~~preferably 130 to 200~~  $\text{l/hm}^2$  is obtained;
- b) the portion of spent grain of the mash is edulcorated acceleratedly by the mash flow dynamic;
- c) when operating, at least two dynamic cross-flow filtration systems (steps) are used in serial order, ~~wherein preferably the first wort is obtained from the first dynamic cross-flow filtration system, while from the second step and possible from the further steps second wort and spent grain are obtained;~~

- d) filtration is such that the wort obtained is essentially free of particles which are larger than  $0.1 \mu\text{m}$ ;
- e) no recycling of the initial feed is applied when operating.

Claims 5-14. (Currently canceled).

<sup>3</sup>  
Claim ~~15~~. (Newly added). Process in accordance with claim 2, wherein said retention rate is  $1 \mu\text{m}$  to  $0.04 \mu\text{m}$ .

<sup>8</sup>  
Claim ~~16~~. (Newly added). Process in accordance with claim ~~4~~<sup>3</sup>, wherein said retention rate is about  $0.1 \mu\text{m}$ .

<sup>5</sup>  
Claim ~~17~~. (Newly added). Process in accordance with claim ~~3~~<sup>1</sup>, wherein the husk content is 40 to 95% by weight based on the husk content in the starting mash of 100% by weight.

<sup>6</sup>  
Claim ~~18~~. (Newly added). Process in accordance with claim ~~17~~<sup>5</sup>, wherein the husk content is 50 to 80% by weight base on the husk content in the starting mash of 100% by weight.

<sup>9</sup>  
Claim ~~19~~. (Newly added). Process in accordance with claim ~~4~~<sup>3</sup>, wherein the operational flow rates, pressures and temperatures are such that a wort flow<sup>rate</sup> of 130 to  $200 \text{ l/m}^2$  is obtained.

<sup>10</sup>  
Claim ~~20~~. (Newly added). Process in accordance with claim ~~4~~<sup>7</sup> wherein in feature c) the first wort is obtained from the first dynamic cross-flow filtration system, while from the second step and optionally from further steps second wort and spent grain are obtained.